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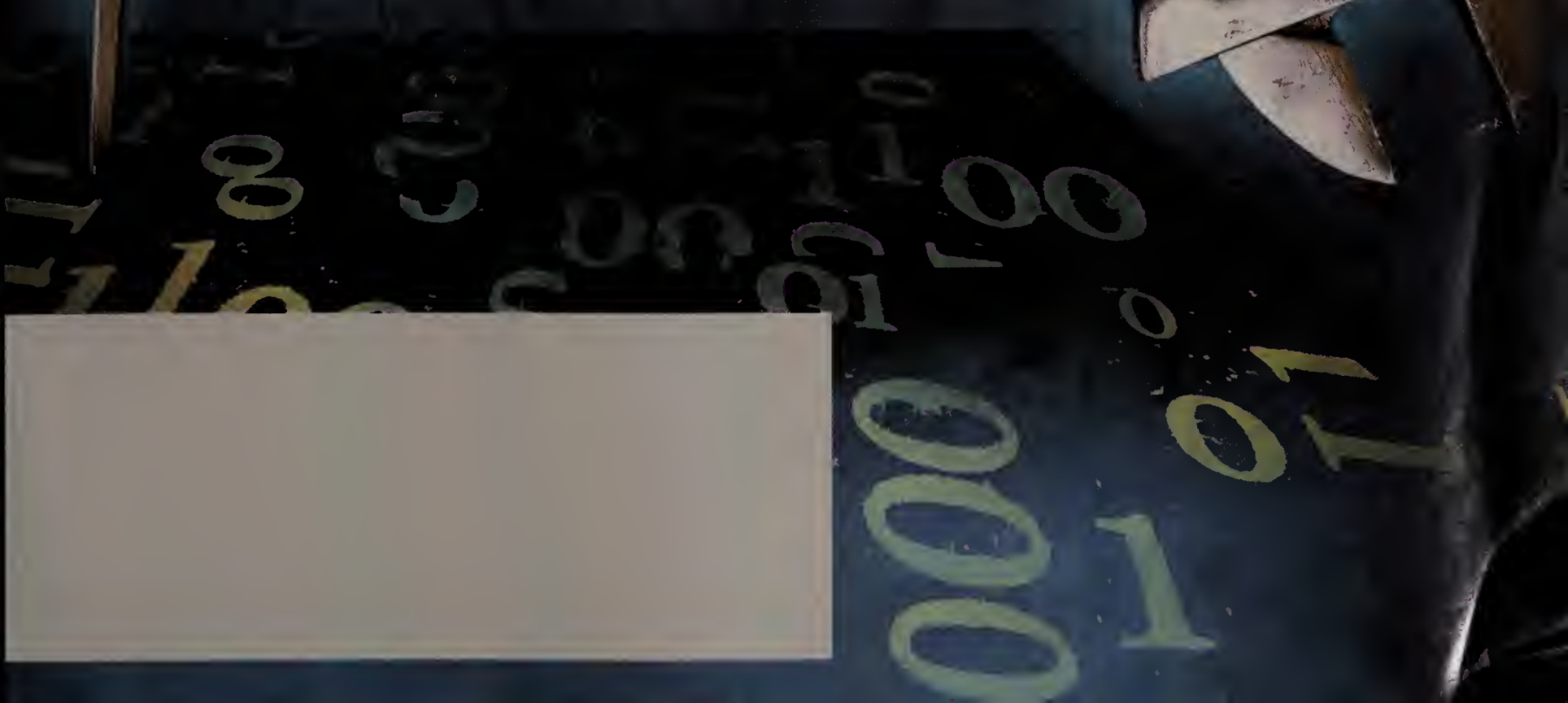
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# TOP

# TOOLS

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# Thinking outside the box depends on what's in the box.

The systemic inefficiencies in many server rooms today, in terms of both energy consumption and utilization, are becoming unsustainable. It isn't simply a question of cost — it's also about maintaining day-to-day operations. A recent study found that an estimated half of all businesses experience IT outages due to power and cooling issues.<sup>1</sup>

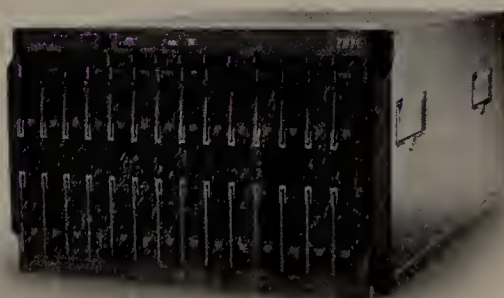
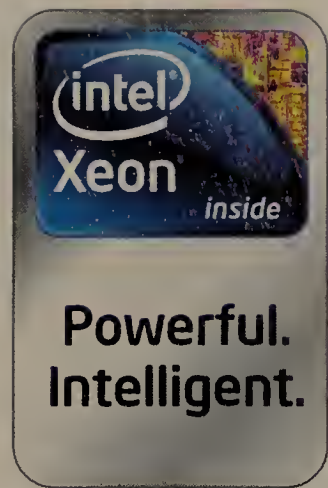
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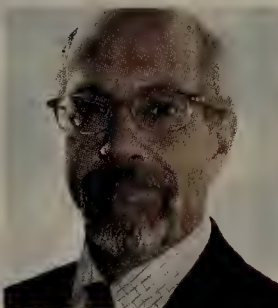
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FROM THE EDITOR | JOHN DIX

# Time is right to consider VDI

**I**f you haven't considered virtual desktop options lately, it might be time to take a closer look. There are a lot of alternatives now and the opportunity might be right, especially if a desktop refresh is in order or you're planning a Windows 7 migration.

Tools available today make it possible to implement just about any flavor of virtual desktop you can imagine, and all promise to simplify management, increase security and reduce help desk calls. John Humphreys, senior director of Product Marketing at Citrix's Data Center and Cloud Division, outlines these options:



- The classic hosted blade PC, a one-for-one swap where a single machine in the data center supports a single desktop.
- Hosted shared desktop, where all processing happens on the server side and a server can support as many as 500 desktops.
- Hosted virtual machine-based desktops, where a VM on a server supports 125 desktops, which involves more customization.
- Streamed desktop, where the operating system and apps execute locally, but the operating system and the apps (or just the apps) are maintained centrally and streamed down when the device boots (you need a persistent net connection).

It's this flexibility that leads to rosy predictions about virtual desktop adoption from the likes of Gartner. And companies in certain verticals are already well down the path.

I recently met with executives at two large banks that love the security aspects of virtual desktops and already have tens of thousands deployed. One of them uses the hosted shared desktop approach and views the data center servers on the back end as a private cloud, one of multiple clouds that are emerging internally for different use cases. The other particularly likes virtual desktops for its huge call centers. Both have aggressive deployment plans.

Think it won't work for you because of the need for mobility or the fact that users need to customize their environments? There are tools for that.

Wyse, for example, has a slick new netbook client, the X90cw, that comes with Windows embedded and doesn't have a hard drive, and multiple vendors now offer software clients for smartphones. If users need to be able to customize their environments, tools from AppSense and others enable you to preserve things such as browser favorites and other settings when you reload apps.

It would be hard to justify an outright leap to virtual desktops, but it might not be difficult to find situations where you can test the waters, especially if you're planning a desktop refresh or upgrading to Windows 7. On the face of it, the benefits look increasingly compelling.

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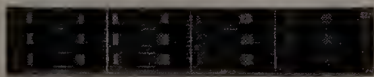
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## Cost and compatibility issues with Windows 7

➔ **WE ARE USING** Windows 2000 terminal servers. All of our users both locally and at our other locations around the country use thin clients, therefore no Windows 7. (Re: Corporate IT eager to deploy Windows 7, survey shows; tinyurl.com/yetnn6b). We're currently not planning to migrate to Windows Server 2007 anytime soon. The two biggest reasons are cost and software compatibility.

We have 13 servers, so to upgrade each of those is a significant chunk of change, and to be honest, we have no reason. I know about the whole end of cycle argument that Microsoft uses, however 2000 works perfectly for our current and foreseeable needs. The second reason is that of software compatibility — we have a large number of proprietary software packages that will not work in 2007. The packages that I have written are a non-issue, they'll work in any version of Windows. I am concerned about those written by other vendors. So, this issue would actually add even more to the upgrade costs. After evaluating the current version of Windows on the market, I'm convinced that Windows 2000 Server is simple, effective and the most stable OS they have come out with. Everything else is just unneeded fluff.

Ogeon

## Cyberattacks: Know thy enemy

➔ **SOME RANDOM CRIMINAL** attacking the TJ Maxx network is not an attack on the U.S. and should not be subject to some rabid government directed counterattack. (It does not take a village — or a country; tinyurl.com/yguw93g).

Ditto for some 15-year-old in Ukraine attempting to distributed DoS the CIA's Web site. To retaliate against the alleged origin of such an attack simply reduces the government agents to the status of "cybercriminal" themselves. How is the U.S. government launching a cyberattack back at some group of teenagers in Finland not also an act of this bogus "cyberwar"? So now shouldn't Finland retaliate against

the U.S. Government? Where does it end? Network defense is based around a preventative posture, anything more aggressive and blatant as a counterattack just exacerbates the problem. Track the attack to its source and point the appropriate law enforcement at the responsible party.

mgg

➔ **CLEARLY THERE HAVE** been consequences to inadequate security — literally billions have been lost to credit card fraud due to incidents like TJ Maxx. The problem however is that most of these incidents can be "solved" merely by throwing money at them — our money. If there is credit fraud — rates simply go higher. The cybercriminals know this. Any number of botnets could have taken millions of computers and all their data off-line permanently but not only would there be no profit in it, but it would spark "real change" — at least for a few minutes.

Anon

## Location clouds the issue of data privacy

➔ **ONE PROBLEM WITH** cloud computing I still don't hear addressed often enough is the issue of geolocation. (RSA 2010: Cloud

security announcements dominate already; tinyurl.com/y1m81os).

For many of my clients they might be willing to try cloud computing but they are concerned about sensitive data being located (or outsourced) to data centers in "unfriendly" countries or countries where laws on data privacy are somewhat

undefined. There was recently some debate in the courts about the extent to which the 4th amendment protects hosted e-mail and in the tech community that debate extended to not just hosted e-mail but all hosted data. Even if we conclude that the 4th amendment does protect hosted e-mail and other data that still leaves open the question: "What does the 4th amendment protect in Malaysia? Or China? Or Peru?"

Ben M. Schorr

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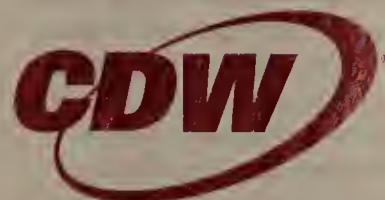


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## National broadband winners: Teleworkers

**THE FCC'S GOAL** to see 100 million U.S. households served with 100Mbps broadband connections could add up to a telecommuting win for businesses. Reforming wireline regulations and freeing up 500MHz of spectrum to use for wireless broadband services could make faster broadband available in virtually every area of the United States. "One of the benefits to enterprises is that they can count on having a much broader pipe available to their employees," says Johna Till Johnson of Nemertes Research, which recently found 84% of enterprises are planning to increase their telecommuting ranks. [tinyurl.com/ydm4jzu](http://tinyurl.com/ydm4jzu)

## Cisco sheds security share

**THE WORLDWIDE** market for security hardware, software and services grew 3.6% in the fourth quarter of 2009, compared to a year earlier. Most vendors benefited from the upswing – with one big exception. Cisco's share fell from 25.4% in Q4 2008 to 17.9% in Q4 2009, according to research firm Canalys. Cisco held on to enough of the pie to retain the No. 1 position in IT security, but McAfee, Symantec, Check Point and Juniper Networks all enjoyed double-digit market share growth. In the security appliance market, in particular, Cisco still dominates with a 27.7% share, "but its competitors, such as Juniper, are catching up," says Canalys analyst Alex Smith. [tinyurl.com/ydnfn5r](http://tinyurl.com/ydnfn5r)

## Win 7 SP1? We're not waiting

**SPEAKING OF** XP, corporate IT teams are ready to move on. Among 923 IT professionals polled by Dimensional Research, 87% plan to migrate to Windows 7 and 46% don't plan to wait for the release of Service Pack 1 before they do. "In April 2009, there was a lot of skepticism toward Windows 7, but there is such a level of confidence in the operating system at this point they are prepared to skip Service Pack 1, which is standard operating procedure for many," says Wynn White of Dell Kace, which commissioned the survey. One reason for the rush: the cost and overhead

of maintaining XP as it gets older and more out-of-date. [tinyurl.com/y9fe8ry](http://tinyurl.com/y9fe8ry)

## Digg buries MySQL

**DIGG'S ENGINEERING** team has stopped using MySQL, reflecting a recent similar move by Twitter. Digg is abandoning MySQL because of the "increasing difficulty of building a high performance, write intensive application on a data set that is growing quickly, with no end in sight," according to John Quinn, Digg's vice president of engineering. The company is moving to Cassandra, a distributed database management system originally developed by Facebook. Digg made several other changes, including rewiring all its application code, installing a new client and server architecture and moving away from the LAMP stack. But the switch away from MySQL may be the most significant infrastructure change of all, Quinn says. [tinyurl.com/yanzdx](http://tinyurl.com/yanzdx)

## Lights out for incandescents

**IT'S THE** end of an era at Toshiba, which last week ceased production of mass-market incandescent light bulbs after manufacturing them for 120 years. The company had planned to halt production next year but moved up the date by a year to focus on more energy-efficient products, including LED lights. [tinyurl.com/yayxbjy](http://tinyurl.com/yayxbjy)

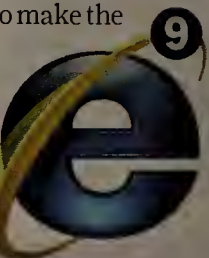
### Cool Tools

## South by Southwest fun

Keith Shaw finds a company offering free phone numbers for small business, participates in a typing race and server building challenge and finds a way to add images to his Twitter stream. [tinyurl.com/ybneral](http://tinyurl.com/ybneral)

## IE9 chatter heightens

**WE LEARNED** a few new things about Internet Explorer 9 last week, but one of them isn't its due date. Without revealing when the browser will become generally available, Microsoft promised to support HTML5 and to drive efforts to make the Web presentation specification a standard. The company also shared details about IE9's new script engine, internally known as "Chakra," that's designed to achieve greater speeds and deliver pages faster. Another interesting nugget? IE9 won't run on Windows XP. [tinyurl.com/ybel56h](http://tinyurl.com/ybel56h)



## IPv6 assistance

**COMCAST AND** Internet Systems Consortium are offering a free tool to help carriers and enterprises migrate to IPv6. Called Address Family Transition Router, the software enables a user whose computer, printer, gaming system or other Internet-connected device supports IPv4 to access IPv4 content and services over an IPv6-based network. "The most obvious use case [for AFTR] is carriers because those are the

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GOOD BAD UGLY

## Curbing domain abuse

**SECURITY AGENCIES** in the United States and United Kingdom are pushing ICANN to adopt measures that would help reduce abuse of the domain name system. Law enforcement officials often run into difficulty when investigating domain names used in criminal activities, since registrants use false details and stolen credit cards. A new set of recommendations submitted to ICANN from the FBI and the U.K.'s Serious Organised Crime Agency includes stronger verification of registrants' name, address, phone number and e-mail address, and stronger checks on how they pay for a domain name.

good

## Subpar privacy efforts

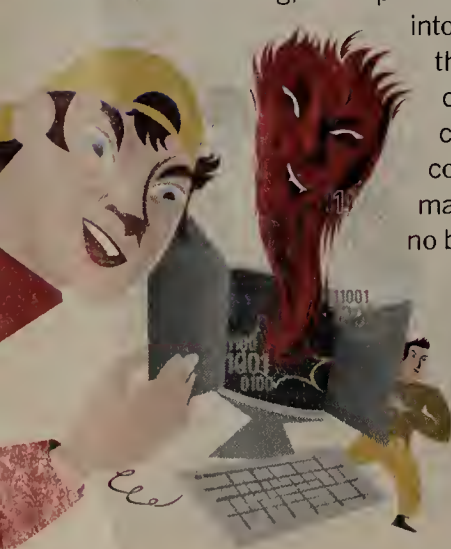
**A U.S. Federal Trade Commission** official lambasted Google for the launch of its Buzz social-networking tool and complained that many other Internet firms, including Facebook and Microsoft, aren't encrypting the consumer data that lives in their clouds. "I realize that companies continue to take a testing-the-water approach to privacy because no regulatory agency has sent a clear message that this behavior is unacceptable," said Commissioner Pamela Jones Harbour. "I would like to see the commission take the position of intolerance toward companies that push the privacy envelop, then backtrack and modify their offerings after facing consumer and regulator backlash."

bad

## Nets defenseless against stealth threat

**AN UNDETECTABLE** browser exploit that opens corporate networks to hackers tops a list of the most dangerous new attack methods. Called DNS rebinding, the exploit works by tricking browsers into seeking internal servers on the victim's network under the direction of the attacker, who can order it to find and send corporate data to an outside machine. The browser exhibits no behavior out of the ordinary, and DNS servers are not tampered with. "It's pretty much impossible to see. It leaves no traces," says Jeremiah Grossman, CTO of White Hat Security, which compiled the top 10 list of new threats.

ugly



ones that are running out of IPv4 addresses," says Suzanne Woolf, manager of strategic partnerships for ISC. "But a lot of enterprises are not that different from carriers in terms of what they have to do to operate their networks. There may be enterprises that discover cases where interoperability between legacy IPv4 devices and IPv6 networks is required." [tinyurl.com/yc2p47o](http://tinyurl.com/yc2p47o)

## VDI price break

**MICROSOFT IS** lowering the cost of running Windows in a virtual desktop deployment, answering critics who say its licensing scheme, known as Virtual Enterprise Centralized Desktop, is too confusing. For customers who already pay for Microsoft's Software Assurance program, Microsoft's VECD pricing scheme forced them to pay an additional \$23 per year for each client device used in a virtual desktop infrastructure. Now that extra charge is going away, effective July 1. This holds true regardless of whether the customer is virtualizing desktops using technology from Microsoft, partner Citrix or a competitor such as VMware. In conjunction with lowering licensing costs, Microsoft is teaming up with Citrix to offer a year's worth of free desktop virtualization to customers who switch from VMware. [tinyurl.com/yctm7t7](http://tinyurl.com/yctm7t7)



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## Nasdaq hits 18-month high

**GROWING CONFIDENCE** has pushed the value of tech company shares up to levels not seen since late 2008, when the implosion of Wall Street sucked the air out of credit markets and dried up technology sales. The tech-heavy Nasdaq last Thursday closed at 2391, its highest point since the end of August 2008. Tech vendors have been helped by a steady stream of upbeat IT-specific news, and have led other sectors in the recovery from recession lows of a year ago. [tinyurl.com/yh5uxmx](http://tinyurl.com/yh5uxmx)

## Gender discrimination linked to poor management

**THE FALLOUT** from poorly managed IT projects is never good, and now there's a new concern associated with runaway tech endeavors: gender discrimination. New research suggests that technically-oriented women could face gender discrimination in their jobs in part because of mismanaged projects. Tech firms rely excessively on a "hero mindset" to save projects that are poorly organized, and employees with family responsibilities — often women — suffer in terms of recruitment and job assignments as a result, according to a report. [tinyurl.com/yfst6q2](http://tinyurl.com/yfst6q2)

# Cisco Ethernet switches to play broader roles

BY JIM DUFFY

**CISCO LAST** week unveiled new Ethernet access switches and enhanced routers designed to take on more of the jobs frequently handled by separate devices, such as those dedicated to handling video traffic or ensuring network security.

Cisco's latest offerings fit into its Borderless Networks strategy, a concept it introduced with its ISR branch routers last fall. Those routers, dubbed ISR G2, are optimized for video and virtual services.

Last week, Cisco extended video enablement among its Catalyst fixed configuration access Ethernet switches. It also expanded the energy efficiency and security capabilities among some of its switches and routers. "The days of the stand-alone appliance that sits alongside a network are over," says Zeus Kerravala, an analyst at the Yankee Group. "Much of this stuff should belong in a network device. The value proposition is that it's much easier to automate a lot of the process that goes into making those modifications" for video, power and security.

"The idea of Borderless Networks...gets away from the traditional idea that the network has to have a 'hard' edge," says Steve Schuchart of Current Analysis.

Even so, both analysts say Cisco switching rival HP shouldn't be in any rush to try and match or exceed what Cisco's announced. The company will have its hands full closing the 3Com deal and digesting the company; after that, it can focus on what its customers



Cisco Catalyst X-series switches can share a power supply when stacked.

demand in video, power and security support, they say.

As for Cisco customers, they may have a hard time comprehending and literally buying into the company's Borderless Networks scheme. "Cisco's going to have to beat this drum awfully hard," Schuchart says. "Borderless Networks is not a thing customers are going to understand in five minutes. Cisco's going to have to do a lot of work to drill it down to specific cases for customers."

Some of the tangibles to last week's Borderless Networks launch are the new switches. The Catalyst 3750-X (\$5,200) and 3560-X (\$3,400) are stackable devices with embedded security, energy efficiency, video and mobility features.

Both switches support 24 or 48 10/100/1000Mbps Ethernet ports, Power over Ethernet+ capabilities, four Gigabit or 2 10G Ethernet modular uplinks, and Cisco StackPower features for allowing switches in a stack to share a power supply. The 3750-X also supports Cisco StackWise Plus, which enables nine switches to be grouped in a

single logical unit with a 64Gbps interconnect.

The switches also feature IEEE 802.1ae "MACSec" data encryption, which secures LANs from attacks such as passive wiretapping, masquerading, man-in-the-middle and some denial-of-service attacks. The switches also include location-based services for mobile users and Cisco EnergyWise 2.0 software for energy efficiency, and support video services that adhere to Cisco's MediaNet network video enablement strategy.

Cisco also announced that its TrustSec security architecture, which authenticates users based on identity and policy, is now available across the 3750/3560 switch lines.

Another new switch line is the Catalyst 2960-S. This roughly \$2,000 switch comes with 24 or 48 10/100/1000Mbps ports, four Gigabit or two 10G Ethernet SFP+ fixed uplinks, a 20Gbps stacking interconnection, and 15 watts/port PoE and PoE+. Without PoE, the 2960-S requires less than 2 watts/port, Cisco says.

Borderless Networking enhancements for Cisco's routers include MediaNet, EnergyWise and other extensions for various applications. The ISR G2 3900E, 887, 887V, 888E and 1921 platforms now have MediaNet 1.0 software for resource reservation, QoS and device detection, and embedded video processing; and EnergyWise-enabled slot-based power control and real-time reporting capabilities via a 48-port 10/100/1000Mbps EtherSwitch module. ■

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# The top 6 corporate issues for Windows Phone 7

BY JOHN COX

**SOMETIME IN** the next few weeks, Microsoft will reveal features, services and shortcomings for Windows Phone 7 in the enterprise. It will be one of those good news/bad news moments for corporate IT departments.

So far, Microsoft's mobile platform executives have hammered at the consumer focus for the radically redesigned Windows Phone operating system. At last week's MIX10 Web developer conference, where details of the Windows Phone platform and development tools were unveiled, executives sidestepped, minimized or deflected nearly every question about how and how well the operating system will play in business mobility.

"Not all the enterprise elements are being disclosed here," says Todd Brix, senior director, product management, for Microsoft's mobile communications business. "More will be coming up later in the spring."

But based on comments, acknowledgments and hints, here's what we know:

## 1. A platform shift

Microsoft's mobile platform is no longer enterprise-centered. It takes its cues and priorities from Microsoft's research on one issue: What is needed to make an emotionally compelling user experience for consumers.

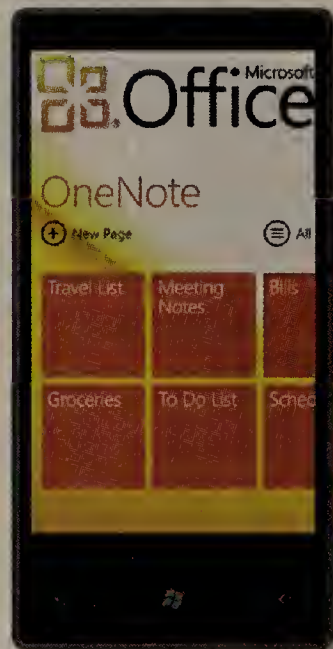
The marketing mantra is that Windows Phone is the phone anyone can use for personal and business needs. "With Windows Phone 7, we said 'let's build a really compelling user experience' and we did an overhaul of many parts of the operating system," Brix says. That "experience" can then be enhanced and focused to meet specific enterprise needs. "Windows Phone 7 won't necessarily have all that Windows Mobile 6.5 has [for the enterprise]," he says.

The success of the iPhone and the fast-rising adoption of Google Android-based phones seem to justify that new focus and its relevance for enterprise users. And Brix says that Microsoft has been "kind of surprised [at the] ton of interest" in Windows Phone, expressed by independent software vendors (ISV) targeting business users.

## 2. Full break from previous Windows Mobile applications

Say goodbye to native applications, backwards compatibility and multitasking.

Applications written for the older Windows Mobile platform (now renamed Windows Phone Classic) were installed directly on the device and ran on the underlying OS kernel,



Windows Phone 7 users can use their Exchange Server credentials to directly access SharePoint sites.

analogous to applications on Windows PCs.

By contrast, all Windows Phone 7 applications execute within one of two Microsoft runtime environments: XNA for games, and Silverlight for all others.

Furthermore, Windows Mobile applications will not run on Windows Phone devices, Microsoft officials confirmed. Though it has repeatedly emphasized that, depending on the application, developers may be able to re-use or readily adapt it for the new platform.

There are several implications to this. You won't be able to just load existing line-of-business Windows Mobile applications written in C/C++ or other languages on Windows Phone 7 devices. They will have to be redesigned and rewritten, though because of Microsoft's development strategy, a substantial amount of existing code in some applications can be reused directly or used with minor changes.

A related problem for some is the fact that Microsoft is not exposing the multitasking capabilities of the underlying Windows Embedded CE R3 kernel to developers.

But some of the benefits of multitasking are being offered via such things as the push notification service, the common integrated tasks and capabilities that apply to applications residing in one of several Windows Phone 7 application groupings, called "hubs," such as People, Music, Photos and Office.

"It's very different from Apple," says iPhone user Mark Tinderholt, a developer with Avanade, a systems integration joint-venture by Accenture and Microsoft, which has done some big Windows Mobile deployments. "The iPhone has discrete apps that do one thing. There's very limited integration." Tinderholt speaks from experience: he has 35 apps on his own iPhone and organizes and

administers them manually, with rather limited options.

## 3. Existing skills and updated Microsoft toolkits

Enterprise software creators and ISVs will be able to use a wide range of Microsoft developer skills and expertise to begin building applications for Windows Phone. Apart from the new mobile user interface, this is the most important element in Microsoft's aggressive attempt to be a mobile leader.

Today, with a gazillion applications listed in Apple's App Store and a megagazillion downloads, it's easy to forget that when the first iPhone was released, the only software development option offered by Apple was for Web applications within the iPhone's Safari browser. It was only after immediate, passionate demands for a software development kit that Apple crafted the App Store.

Microsoft has all of this already in place, and millions of Windows and Web developers using Microsoft tools can start writing phone applications. In many cases, a substantial amount of existing code can be imported and re-used.

The latest versions of Microsoft's core developer tools all support Windows Phone development: Visual Studio 2010, Silverlight 4, Expression Blend 4 beta and XDNA Game Studio 4. All incorporate a Windows Phone emulator, running on a complete build of the Windows Phone 7 OS. Visual Studio programmers can drag and drop controls onto a Windows Phone surface, bring in existing Silverlight libraries or Azure cloud projects, and wire them up to data sources, behaviors and services, just like they do when writing software for a Windows PC.



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It's a Microsoft-focused environment to be sure, but most enterprises have a strong Microsoft base with user PCs, Web infrastructure and back-end servers.

"Silverlight doesn't look like a problem," says Piers Finlayson, product manager (and former coder dealing with human interfaces) with Metaswitch Networks, which uses, among other tools, Microsoft Visual Studio.

#### 4. Windows Phone Marketplace tailored for enterprise

For mobile users, the redesigned Windows Phone Marketplace, accessed via its own "hub" on the device, will be the sole location for finding and downloading phone applications.

But, in one of the few enterprise-specific acknowledgements at MIX10, Microsoft executives promised that software distribution "alternatives" will be unveiled later this spring. These could include secure private areas on the Marketplace site, where employees could browse and download company-specific software or a server implementation of a private Marketplace behind the corporate firewall.

That will give IT more control and security over corporate applications directly accessing enterprise applications, data and services.

#### 5. Security and management infrastructure

Historically, Windows Mobile (and Research In Motion's BlackBerry) has co-existed with Microsoft's server infrastructure for mobile security and management. The key addition to the Windows Mobile 6.1 release in April 2008 was the addition of hooks into a then-new server product: System Center Mobile Device Manager 2008.

Microsoft Exchange Active Sync is code that lets Windows Mobile devices sync with Exchange Server, receive push e-mail and implement a range of security options, such as remote data wipe and encrypted connections. ActiveSync is licensed and used by other platforms such as iPhone. In fact, the iPhone's expanded ActiveSync support helps to account for its inroads into the enterprise, despite the fact Apple will not provide an enterprise-scale security and management framework comparable to Microsoft or RIM.

The unanswered question is how much of this infrastructure is supported in Windows Phone 7? As Brix's comment above suggests, there are hints that some of this rich capability will be lost, at least in the first release of the operating system. Will the mobile VPN still be supported?

#### 6. Microsoft Office and SharePoint

From the user perspective, the most visible

## DEMO start-ups go for the cloud

BY JON BRODKIN

**SIXTY-FIVE COMPANIES** will debut new, innovative technologies at DEMO Spring 2010 in Palm Desert, Calif., this week, and not surprisingly there's a heavy focus on cloud computing.

"The cloud is big — every part of the cloud is getting mined or exploited," says DEMO conference chief Matt Marshall.

While DEMO products are typically consumer-focused, there are numerous products that will be useful to business folk. For example, start-up FathomDB is unveiling a relational database that runs in the cloud, with pricing based on capacity.

Another company called Gwabbit, which appeared at last year's DEMO with an e-mail contact management system for Outlook, is back at DEMO to introduce a cloud service that syncs contacts across multiple systems.

"Not only is it grabbing your contacts, but it's handshaking from the cloud to the various services you have as a user," such as LinkedIn and Facebook, Marshall says. "It's handshaking with each one of these to keep the cloud live and synced with all your contacts and changes."

A DEMO company called Teneros also focuses on social networks, but with an enterprise angle. Its software, called

Social Sentry, lets businesses monitor employee activity on sites such as Facebook and Twitter. The service tracks only public posts, with the idea to make sure employees aren't releasing sensitive information.

Marshall, who is in his first year as the head of DEMO, is naturally bullish on the lineup of companies he's chosen. "I was getting excited as I was going through the list," he says.

But this is a tough time for start-ups looking to raise venture capital, notes Jeff Crown, president of DEMO presenter VenueGen. The start-up has built a 3D virtual meeting platform with \$2 million from angel investors, and is trying to raise a \$5 million round to expand the company.

Venture capitalists are looking for companies that are both targeting a rich market, and have already demonstrated progress in winning over customers, Crown says. "The venture capitalists want to see customers, revenue and traction, and that's a little bit different than in the past when they were willing to fund prototype and research ideas," he says. ■

**WATCH A SLIDESHOW** of some of the other products, such as this electronic bike from PiMoto, on display at DEMO. [tinyurl.com/y9tlfm9](http://tinyurl.com/y9tlfm9)

enterprise connection in Windows Phone 7 is the "Office Hub" location, with the ability to create and edit Microsoft Office documents, including Word, Powerpoint and Excel, and support for SharePoint, Microsoft's widely adopted enterprise collaboration platform.

"The Office Hub is the tip of the spear and SharePoint is part of that," says Charlie Kindel, partner group program manager for the Windows Phone application platform and developer experience at Microsoft. "There's a huge development platform associated with both of them. All this is [now] available on the phone."

Windows Phone users can leverage their Exchange Server credentials to directly access corporate SharePoint sites, Microsoft's

Brix says. Among other things, that means groups of mobile users can create Windows Phone 7 live tiles of SharePoint-based documents and other information, and open, review and edit them. "You can do all this on a SharePoint environment, without e-mail exchanges or an Internet browsing experience," Brix says.

The mobilization of SharePoint has been a Microsoft priority, created by intense enterprise interest.

An important part of Windows Phone 7 in this context is Microsoft Office OneNote 2007. OneNote is intended as a "digital notebook" that lets users quickly create, gather and search, typed or digitally handwritten notes along with other text, pictures, and audio and video recordings. ■



## TOOLS

# Microsoft being evil and a CMS being very good

**C**I usually admire Microsoft in equal measure to how much it annoys me, but today the balance is seriously in favor of annoyance. The reason? I foolishly installed Microsoft's Office Live Workspace Beta some time ago and then got sidetracked. Thus it was that I ignored the system ... at least until it removed my Autotext entries.



Mark Gibbs' Gearhead

When I write a column I have, or rather 'had', several choices under the "Insert | Autotext | Normal" menu option. These choices would insert a layout ready to be filled with my golden, timeless prose appropriate for whatever I was going to pen ... er, key.

That was until about a week ago. Suddenly, the result of clicking on "Insert | Autotext | Normal" was the message telling me to "Sign in to Office Live Workspace beta" to access this feature. I wouldn't mind that so much if all of my Autotext entries were still available, but nope, that message is all that appears under that menu item. Microsoft has usurped, nay, stolen, some key functionality of Word. Did it ask or warn me? No.

I uninstalled Office Live Workspace Beta in the full expectation that my menu options would be reinstated. Ha. Uninstall, reboot, launch Word, check the menu ... same message. I still get an identical message but now the option does absolutely nothing. I have no idea why uninstalling didn't work. Perhaps I forgot to sacrifice a chicken or say the right incantation.

Microsoft apparently hasn't figured out that this kind of high-handed usurping of

functionality is a huge breach of trust (which implies that Microsoft is being either simply evil or simply negligent). As a software publisher you can't just change how your software works in such a way that some service you are promoting becomes obligatory. Well, at least you can't unless you want to annoy a lot of people.

... this kind of high-handed usurping of functionality is a huge breach of trust.

This kind of behavior is even more unacceptable when your users have invested time and effort in organizing how the software is configured. Then your new "initiative" obstructs their workflow.

So, have you faced this aggravating situation, and, if so, how did you correct it?

My other interest this week is content management. I still owe you a review of the content management system (CMS) published by

Interactive Tools, which I briefly mentioned a few weeks ago. I will make good on that promise in a few weeks but until then I have another CMS that bears a serious look — a free, open source, PHP-based product called ocPortal.

Installation is impressively easy. I installed the system on the Synology DiskStation I reviewed a few weeks ago and, other than

► See **Gearhead**, page 16

## IT asked and answered

Ron Nutter and Steve Blass

tackle your tough tech questions at [tinyurl.com/yg2o434](http://tinyurl.com/yg2o434)

I just completed a bachelor's degree in computer science and engineering. My final semester electives were cryptography and network security and network management. Recently I have purchased the CCNA Self-Study Resources by Wendell Odom. I will complete CCNA in a month or two. Now the question is "What next?" How and in what ways do I prove my talent and immense interest in networking?

—rockhard04

➔ Having a certification such as CCNA can be helpful when trying to find a job in networking. Depending on the competition for a job, having the certification could be the difference between getting interviewed. But since you have little practical experience, you will run into some challenges. To get your foot in the door you'll need to consider taking an entry-level position. Another way to get some experience is to look at offering your services as a volunteer for a nonprofit organization. If you don't have any success in finding a volunteer position, try asking some recruiters in the area. This will accomplish two things — it will give them and you an opportunity to give back to the community, and get you in front of folks that may be able to help you find a permanent position. The experience will also give you a chance to see what kind of specialization you may want to pursue.

## GADGETS

# Refresh your iPhone while you sleep



Keith Shaw's  
Cool Tools

### THE SCOOP

## Nightstand Charging Dock for iPhone

by Kensington, about \$35.

► **What it is:** This handy device acts as a charging dock for your iPhone or iPod, but does it in a unique way — you connect your iPhone/iPod horizontally (landscape mode) to the charging dock, which acts like a kickstand. This lets you create a nightstand alarm clock effect for your iPhone/iPod, which can be great when you're traveling. Kensington offers a free iPhone app called Rise & Shine, which replicates a nightstand alarm clock and offers different face styles.

► **Why it's cool:** True, the iPhone already has a Clock application and alarm clock, but when I'm traveling I usually have early morning meetings that make me nervous about not waking up on time. With the Kensington device, it's easy to see and view — a settings option lets you keep the phone "on" all night, and since it's also recharging the device you're not drawing power from the iPhone. The Rise & Shine app also utilizes the GPS function and gives you the current temperature for the city you're in. The unit can be powered via USB port or electric power outlet.

### ► Some caveats:

While you can disable the shutdown feature to prevent the clock from going away on the

Rise & Shine app, other applications that use pop-up notifications (including the Facebook and the text messaging apps) can block the time display, defeating its purpose. Also, the clock can be very bright, bothering people who need darkness to fall asleep — you'll need to adjust the brightness settings.

► **Grade:** ★ ★ ★ ★ (out of five).

### THE SCOOP

## LaDiDa iPhone app

by Khu.sh, \$2.99 in the iTunes App Store

► **What it is:** This iPhone app is an entertaining way to turn your normal singing voice into something that replicates today's music stars. Clicking the record button starts a countdown, and then you sing into the iPhone microphone. The app processes the recording, corrects your pitch, adds reverbs and then adds background music. Pressing "play" lets you hear the results, a song worthy of hitting the radio station. You can easily adjust different styles (pop, synth, rap and so on) and the speed of the percussion, in addition to how much pitch correction and reverb you want.



► **Why it's cool:** This is a fun way to get more people to experience some of the auto-tune, pitch correction and music stylings that professional singers experience. If you are a good singer, this will let you sing a song and see how it sounds with different music styles and speeds. Or you can sing a popular song in your own unique way. The app also lets you share songs with friends via Facebook Connect.

► **Some caveats:** I'd love to see additional background styles ('80s new wave! Classic rock! Country!) and maybe some additional instrument options. Also, the small microphone on the iPhone tended to crackle — a better audio input attachment might be needed for more serious singers.

► **Grade:** ★ ★ ★ ★

Shaw can be reached at [kshaw@nww.com](mailto:kshaw@nww.com). Follow him on Twitter at <http://twitter.com/shawkeith>.

## TRUE FACT

# 400,000,000 gigabytes

The traffic that will transverse wireless networks each month in 2013.

SOURCE: FCC CHARACTERISTICS  
GENACHOWSKI

### ► Gearhead, from page 15

providing basic details, ocPortal installed without any trouble (note that if you are on an internal network and you aren't running an internal DNS server that identifies internal machines by a domain name you need to enter the ocPortal's IP address as the server name).

OcPortal is best thought of as a structured CMS. It implements a portal-style page construction although you can easily ignore this and create more normal site architectures.

OcPortal also supports just about all the types of content you might need: Page banners, search engine optimization, newsletters and mail campaigns, subscriptions, e-commerce, user support — the feature set is huge.

So far, I am enormously impressed. The software installs and runs without any problems, the features all work, the documentation is very good and voluminous, and the performance is excellent. I award ocPortal 4.5 out of 5. Check it out and let me know what you think. Heaven knows the price is right.

Gibbs is content aware in Ventura, Calif. Your content to [gearhead@gibbs.com](mailto:gearhead@gibbs.com).

## Google Gmail vs. hosted Microsoft Exchange

### Hosted Exchange wins



Jonathan McCormick is chief operating officer at Intermedia.

MORE BUSINESSES ARE LOOKING TO hosted communications services to reduce costs and ease management, and the choice often comes down to Google's Gmail (the key component of Google Apps) or Microsoft Exchange 2010.

For many, the decision will hinge on the features and functions. Heavy BlackBerry and Microsoft Outlook users, for instance, may default to the safety of hosted Exchange providers and their proven ability to effectively support both tools. And while Exchange is perfect for these and other customers, it's important to look beyond features and functions in order to consider the total experience the providers wrap

around their hosted services.

Hosted Exchange services are available from a mature ecosystem of partners delivering the service direct from their own data centers and, alternatively, directly from Microsoft. To be sure, there are substantial differences between the companies, but generally they have loads of experience.

Here are the major evaluation criteria to keep in mind when comparing hosted Exchange with Google Apps and why Exchange — particularly with hosted Exchange 2010 available — comes out on top:

- **Ease of migrating your existing e-mail data, users, contacts and more.** This is the biggest stumbling block for most organizations when evaluating hosted services. It's easier to stand pat than transition to a new service. But a sophisticated hosted Exchange providers have been dealing with these issues for years. They will have a heavily automated (ideally free) migration process that ports all that you've invested in your existing e-mail setup to the new environment. Take a minute to walk through Google's online sign-up process, and it is clear the company's preferred mode of operation is "self serve".
- **Certified 24x7 support for the tools your organization relies on — BlackBerry and Microsoft software.** If your organization relies heavily

► See **Exchange**, page 20

### Google Gmail wins



Dan Riley is vice president of services at Isos Technology.

WHILE THIS DEBATE IS SPECIFICALLY about Google's Gmail for business vs. Microsoft Hosted Exchange Server 2010, it's safe to say any organization looking at these core messaging products will demand associated scheduling and collaborating products, so that should be kept in mind.

Gmail is, after all, one of the critical components of Google Apps, a suite that is used by more than 1 million businesses. In fact, we can assume the growth of Google Apps is one of the main reasons Microsoft has bolstered its Business Productivity Online Standard Suite, which includes Exchange, SharePoint, Office Live Meeting and Office Communications.

But e-mail is the core of both suites, so we come back to comparing Gmail vs. Hosted Exchange.

Typically, the Exchange Camp will argue that the Gmail platform is not as full-featured, lacks support channels and doesn't support all mobile devices. Before we dive deeper into these half-truths, let's discuss one item the Exchange side won't argue: cost.

Gmail (and the entire Google Apps platform) costs much less on a per-user basis than a comparable hosted Exchange 2010 solution. On average, hosted Exchange costs \$141 per user per year compared with the \$50 per user per year for Gmail. If you consider a larger organization with 500 users, on average a hosted Exchange Server will cost \$45,780 more per year.

I can hear the escalating cries from the Exchange Camp, "Cost is not the only deciding factor". That's true, and when you add it all up, there's lots of value in the Google story.

Consider the innovation factor. Last year Google added more than 40 new features for its Premier Edition Gmail users, in addition to the 45 new innovations released to its Docs and Sites applications. This in contrast to the hosted Exchange users who have waited up to three years to see a single new enhancement to the Exchange platform.

With the release of Exchange Server 2010, Managed Service Providers (MSP) are now scrambling to upgrade, which means that customers may be waiting awhile for their MSP to migrate them to

► See **Gmail**, page 20

**For hosted e-mail service, the better bet is:**

**49% Google Gmail (as part of Google Apps)**

420 votes



**51% Hosted Microsoft Exchange**

441 votes

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### ► Exchange, from page 17

on Outlook and BlackBerry, and plans to continue doing so, good hosted Exchange providers can offer you the confidence that their support staff is Microsoft and Research in Motion. Likewise, Outlook was designed to run over Exchange, not Google Apps.

- **Business-class reliability.** Solid hosted Exchange providers operate multiple data centers with redundancy and multiple Tier-1 Internet connections. They guarantee and deliver on five-nines availability. That translates into less than six minutes of downtime per year. Google does not have that history with business users. With hosted Exchange 2010's architectural improvements, a good provider can also guarantee 100% data protection — never lose your e-mail — at no additional cost.
- **Control over the environment.** Many organizations considering migration to hosted communications tools will likely continue to use other Microsoft applications on-premise. Sophisticated hosted Exchange providers can offer single sign-on experience across these applications and other benefits that come by integrating with Exchange's Active Directory.

While some will argue that Google Apps is more cost effective, hosted options from either camp will result in massive cost savings vs. use of an on-premise server.

Considering the criteria outlined above, the most important question boils down to which service, in the larger picture, adds the right value to your business. For most businesses — particularly firms with knowledge workers and others heavily dependent on cutting-edge communications software — hosted Exchange is the right answer. ■

*McCormick is chief operating officer at Intermedia.*

### ► Gmail, from page 17

the latest release. Even Microsoft's hosted Business Productivity Online Standard Suite is still running Exchange Server 2007, which illustrates the complexities involved.

Another criticism posited by the Exchange faithful is that Gmail doesn't even offer a support phone number! All Google Apps Premier Edition customers have a support phone number for critical issues and escalation needs. In addition, there is a large online community and support site with reams of information regarding general questions about the service. Not to mention, the growing number of Google Apps MSPs that offer direct channels for phone and e-mail support.

Another frequently heard knock against Gmail is the lack of support for mobile devices. Google's Gmail, calendar and contacts are available via a two-way sync with native applications or through installable applications on the majority of smartphones today. This includes the seamless integration with Google's own Android-based devices that are gaining momentum in the mobile market.

For RIM devices and the associated BlackBerry Enterprise Server (BES), Google provides a connector for BES that allows BlackBerry users to utilize native applications for access to Google's Gmail, calendar and contact data. Google's Connector for BES also enables enterprise administrators to wipe remote devices the same way Exchange Server does.

As Microsoft continues to do the heavy lifting required to push Exchange Server into the hosted landscape, Google continues to effortlessly roll out exciting innovations to Gmail and Apps. Considering the value, features, rate of innovation, ease of use and community support, no one will be surprised to see millions more make the exchange for Gmail and Google Apps. ■

*Riley is vice president of services at Isos Technology, an IT solutions company and an authorized reseller of the Google Apps.*

### Cost savings?

➔ "Hosted options from either camp will result in massive cost savings vs. use of an on-premise server." I am not ready to concede this point made with absolutely no proof. We have evaluated outsourcing a number of times and we have never been able to demonstrate a substantial cost savings for hosted Exchange. ANON

### Onsite exchange...

➔ What it comes down to is, do you really want to trust your mission-critical information someplace in the cloud? For small companies (less than 10 employees) it probably works well as long as e-mail is not critical to work, but for any large enterprise it wouldn't make sense to have it hosted off-site.

You are just trading a large capital investment every three to five years with a monthly service charge. If you have a good IT team it will cost less in the end to keep it all in house. ANON

### Gmail Vs. Exchange Hosted

➔ Maybe the story should have been about the cost and security of hosted e-mail. What happens to my e-mail if I cannot pay the hosting company? Will they hold it hostage? What happens to my e-mail if the hosting company goes broke (as many cloud companies did during the recent economic crash). So the question is, do you want to host? If so, why? And how would it affect you? While it might be cheaper, that is not the total picture. What about archives and history? And if I have a legal issue? The list goes on. CYBDIVER

### Microsoft too expensive; Google — no thanks; Zimbra — nice try.

➔ We are using and hosting several Zarafa groupware servers. I think Zarafa (bar none) is the best Exchange replacement yet. Outlook, Web Access, mobile devices, BlackBerry integration, management, and others. Very complete, very simple to manage, very cheap to run. ANON

### Regulated industry

➔ If you are not a regulated industry with technical users, Google's offering is very attractive. If you are regulated industry, I trust Microsoft is working harder to figure this out. Hence, keeping on premise for the next two to three years is necessary. ANON

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THE NEW DATA CENTER

We've compiled a list of 10 hot tools that will make life easier for IT execs who are upgrading their data centers with the latest and greatest technologies. These tools don't have to cost a bunch. In fact, several are free. Others can cost as much as \$500,000. But they all solve fundamental problems facing data center managers.

THE ISSUE STARTS NOW

**E**nterprise data centers are notoriously complex, costly and energy inefficient, which leaves plenty of opportunity for innovative vendors to introduce products that ease the pain. Here are 10 that are worth a look.

## 10 hot tools for the data center

~ BY BETH SCHULTZ ~



**26** FROM LEFT TO RIGHT: **Scott Engel**, IT director at Transplace in Dallas, says his fave tool is Silver Peak's WAN acceleration product. **Bill Fife**, director of IT at Wholesale Electric Supply in Houston, loves his Xsigo Systems virtual I/O director. Wet Seal's **Greg Maxwell** swears by his Coyote Point Systems' load balancer. **Jeffrey Weinstein**, director of network services at MedManagement LLC in Birmingham, Ala., relies on Vizioncore's vRanger Pro to back up his virtual machines. **Yefrem Kozin**, manager of College Information Systems at Los Angeles Valley College, is a huge fan of LeftHand Networks' iSCSI storage systems. **Ambers Ferrara**, senior systems admin at Transplace, has 90% of his data center running on VMware. He's sold on vSphere. **ONLINE: Tom Franciosi**, CIO at Covenant Dove in Memphis, can't live without his Tools4Ever's User Management Resource Administrator (UMRA). [tinyurl.com/ykahdug](http://tinyurl.com/ykahdug)



## 1. Cloudkick SaaS application

**VENDOR:** Cloudkick

**PRICE:** From \$99 to \$599 monthly, depending on the number of servers. Customized packages are available.

**WHAT IT DOES:** Manages and monitors multiple cloud services from a single dashboard.

**WHY IT'S INTERESTING:** The beauty of cloud computing services lies in simplicity, in easing IT constraints in the data center with on-demand compute or storage resources. But management can be beastly — especially if your organization is contending with multiple cloud providers.

Cloudkick offers its cloud management and monitoring application as a service, bringing together servers from multiple clouds into a unified Web-based dashboard. Users get the ability to manage and monitor servers in multiple clouds, receive alerts, run diagnostics and view performance graphs. The tools work the same way across all cloud service providers that support Cloudkick, such as Amazon EC2, The Rackspace Cloud and GoGrid, among others.

## 2. Max2Go

**VENDOR:** ControlCircle

**PRICE:** Free, at least in initial version

**WHAT IT DOES:** Delivers data center management to smartphone users.

**WHY IT'S INTERESTING:** Load this data center management application onto your smartphone and get a real-time view of your

infrastructure, including power, connectivity, bandwidth and critical systems. Via the mobile GUI, on-the-move data center managers can even issue alerts and manage ticket requests. As new as this tool is, there are a couple of catches. For one, until the company increases device support, you've got to have a BlackBerry device with trackball or trackpad — no touchscreens allowed at the moment, says Ian Finlay, ControlCircle CTO. And, only ControlCircle customers who are provisioned on the company's new portal, Max2000, can use the application to manage their infrastructure and services, Finlay says.

However, anyone can download the application and use it in demo mode, he adds. And, ControlCircle says it is thinking about white labeling the application for use by other providers. Mobilizing data center management is an interesting idea in general, but particularly so when you throw emergencies and disaster planning into the mix. With Max2Go, data center managers can remotely watch over a single rack or a complex managed environment compromising servers, applications, connectivity and security, Finlay says. His one recommendation: Because the application polls for status even when running in the background, users are going to want an uncapped data plan.

## 3. OverDrive 3.0

**VENDOR:** LineSider Technologies

**PRICE:** \$250,000 to \$500,000

**WHAT IT DOES:** Orchestrates policy-based, real-time automation and control of network services, including access and security, across the logical and physical network. This product should not be confused with the company's same-named but functionally different original product, sold for integration with other vendors' network gear to help with IP-based services management.

**WHY IT'S INTERESTING:** This technology will become increasingly important as enterprise IT adds desktop virtualization, test lab

automation and other highly dynamic workloads to the data center, says Rachel Chalmers, infrastructure management research director at The 451 Group. While IT has a choice of automation software for provisioning and de-provisioning virtual machines on the server side, the same hasn't been true for switches and routers that connect those systems to one another. That's the gap LineSider is trying to address, she says. Perhaps better called an abstraction layer than virtualization, OverDrive "provides a uniform interface through which those devices can be controlled automatically according to business policy," Chalmers adds.

## 4. Schooner Appliance for Memcached

**VENDOR:** Schooner Information

Technology

**PRICE:** \$45,000

**WHAT IT DOES:** Uses multicore processors and enterprise-class flash memory to consolidate and optimize Memcache servers.

**WHY IT'S INTERESTING:** Solid-state drive (SSD), or enterprise-class flash memory, technology promises to change the nature of servers, making them smaller and capable of handling greater amounts of memory, says Drue Reeves, vice president and research director with Burton Group. This appliance is representative of the kind of innovation possible when SSD, or enterprise flash memory, works its way into data center gear. Through its use of enterprise flash memory plus Intel multicore processors and high-performance networking, the appliance can serve as many as 850,000 cached operations per second, the company reports. This will be a big boost for companies with traditional Memcache servers, which accelerate Web applications by caching data to reduce database load but

often run into performance snags due to memory, scalability and bandwidth limitations. This new SSD-based Memcache appliance can replace ordinary servers at an 8-to-1 ratio — or even higher; Plaxo, an online address book service with 40 million users, reports achieving a 10-to-1 server consolidation.

## 5. Power Efficiency Estimator and PUE Estimator

**VENDOR:** The Green Grid Consortium

**PRICE:** Free

**WHAT THEY DO:** Measure power efficiency of enterprise data centers.

**WHY IT'S INTERESTING:** Any tool that helps data center managers get a handle on power use and efficiency is worth noting — all the more if it's available at no cost. These new Green Grid tools, due out by month's end should help data center managers figure out if they're on the right track with their power/energy efficiency plans. With the Power Efficiency Estimator, they'll be able to compare different scenarios of power topologies and technologies inside of their facilities. The tool takes into account such factors as workload, availability and space constraints. The PUE Estimator, as its name suggests, gives data center managers a way to measure their facilities' Power Usage Effectiveness at regular intervals. A Green Grid-created metric, PUE determines the amount of energy used by the facility and the IT gear inside of it.

## 6. RNACache

**VENDOR:** RNA Networks

**PRICE:** \$2,000 per server

**WHAT IT DOES:** Turns memory into a shared, network resource

**WHY IT'S INTERESTING:** Like everything else in the data center, it was only a matter of time before system memory went through the virtualization hopper. And that's a good thing if you're looking to speed up transaction-heavy applications in your data center. RNACache, one of two products RNA offers atop its Memory Virtualization Platform, lets applications load their entire working dataset — used for predictive analytics or travel reservations, for example — into a memory cache for faster access and processing. Memory virtualization is cool, useful technology, but not for the everyday workload, cautions Dan Kuznetsky, vice president of research operations for The 451 Group. "This is for extreme transaction processing," he says.

## 7. Surgient Cloud Express

**VENDOR:** Surgient

**PRICE:** \$50,000 for software, documentation and services

**WHAT IT DOES:** Provides rapid deployment for enterprise cloud environments.

**WHY IT'S INTERESTING:** Interest in building enterprise clouds is high, but many IT executives haven't ventured into such an endeavor. Surgient Cloud Express, and other emerging cloud packages of its ilk, could give them the nudge they need to give premises-based cloud computing a whirl. With Surgient Cloud Express, comes the Surgient Platform, licensed for 30 managed CPUs; implementation services; one year of standard support; administrator training; client-specific private cloud architecture; all related Surgient documentation; and tracking and analysis for return on investment. This is all about transforming infrastructure so it's presentable in a cloud, then topping off with a management layer, Burton Group's Reeves says.

## 8. VIO-4000 switch series

**VENDOR:** Virtensys

**PRICE:** Starts in the mid-\$20,000 range, depending on configuration

**WHAT IT DOES:** Virtualizes I/O via PCI Express (PCIe) bus extension

**WHY IT'S INTERESTING:** Data center complexity being what it is these days (a total nightmare) products that help simplify the mess are always welcome. I/O virtualization switches fit that bill for their ability to consolidate, virtualize and share server networking and storage connectivity, not to mention bring down related capital and operational expenses. One of the latest I/O virtualization switch entrants comes to market with the distinction of using the PCI Express bus in its implementation. This is an example of multiroot I/O virtualization (MRIOV), says Burton Group's Reeves. "Think of MRIOV as breaking apart a server and extending the PCI bus, with all the peripherals and the server itself, to the network," he explains. In the case of Virtensys, a single PCI Express cable extends storage and network connectivity from a top-of-rack VIO-4000 switch to servers as needed, eliminating the need for distinct server adapter ports and LAN or SAN access switches. Virtensys supports Ethernet, Fibre Channel, serial-attached SCSI and serial



ATA connectivity. It claims virtualizing I/O resources will allow enterprises to slash server management costs by more than 60%, power and cooling costs by up to 30% and equipment costs by as much as 50%.

## 9. Energy Center

**VENDOR:** Viridity Software

**PRICE:** Annual subscription starting at \$25K

**WHAT IT DOES:** Monitors energy consumption of IT gear in the data center.

**WHY IT'S INTERESTING:** Most power monitoring tools focus on the physical infrastructure. This is limiting, Viridity says, in that it provides data center managers with no insight as to why power is being consumed. Viridity's software examines how applications consume energy — and then recommends how to eliminate inefficiencies. If the Viridity software delivers as promised, it should prove a boon for data center managers looking to increase energy efficiencies.

## 10. Virsto One

**VENDOR:** Virsto Software

**PRICE:** \$1,250, perpetual license for one to two sockets; \$2,500 for three to four sockets; \$5,000 for an unlimited number of sockets. A free, 30-day evaluation version is available for download.

**WHAT IT DOES:** Virtualizes storage at the hypervisor.

**WHY IT'S INTERESTING:** As much as server virtualization benefits the enterprise, it brings with it a host of storage management challenges, from increased data volumes to performance issues. Virsto One, which initially plugs into the Microsoft Windows Server 2008 R2 Hyper-V hypervisor, solves that by placing the storage virtualization alongside the server virtualization. This allows for greater control of storage sprawl, optimization and performance. Mark Bowker, an analyst with Enterprise Strategy Group, compares what Virsto is doing for Microsoft's Hyper-V environments to what VMware has done with its VMSF to deliver high-performance storage in ESX infrastructures. In his "Liquifying IT" blog, he says, "Virsto extends the value of server virtualization by virtualizing the storage as well — the value of virtualization is extended into the underlying storage infrastructure and IT can plan to scale with confidence."

Schultz is an IT writer in Chicago. You can reach her at bschultz5824@gmail.com.

## NEC GIVES RMS WHAT IT NEEDS – VIRTUALIZATION FOR REAL RESULTS.

Revenue Management Solutions (RMS) runs one of the largest Microsoft® SQL Server® databases in the world. Their global econometrics consultancy includes some of the world's largest restaurant and retail chains. To handle the tremendous volume of data required to discover profit insights and provide pricing guidance for their clients, they've adopted virtualization solutions from NEC. Says John Oakes, "The reliability of NEC's technology lets RMS focus on growing our business." At RMS, virtualization is good econometrics.

John Oakes  
Vice President, IT  
RMS

# Data center fave raves

Execs pick their favorite tools, next big buys and their dream products

~ BY BETH SCHULTZ ~



## Scott Engel

**TITLE** > Director of IT infrastructure

**COMPANY** > Transplace, a third-party logistics provider

**LOCATION** > Dallas

**FAVORITE DATA CENTER PRODUCT**  
> Silver Peak Systems' NX-7600



We're doing near-real-time replication between our two data centers, in Dallas and Lowell, Ark., and we're seeing anywhere from three to five times reduction — and sometimes as high as 28 times — on that traffic volume using the Silver Peak product. We have a single DS-3 today and we're able to push more than 1TB of data through it daily.

Without the Silver Peak, we were going to have to upgrade to OC-3 from the DS-3. And, the ROI with the Silver Peak was only approximately one year. We've been using the Silver Peak for a year and a half, and we're replicating even more all the time, so now we're moving up to OC-3. But, again, if we didn't have the Silver Peak we would need to go to something even larger than that. We continue to add replication jobs to give us better disaster-recovery capabilities. We want as near real time as possible.

## ON DECK > Cisco Nexus 1000V Series Switch

From a network side, we're looking at implementing the Cisco virtual switch, the 1000V, in the next couple of months. Our main driver is visibility.

Since our VMware rollout, our systems or virtual machine administrators have had control of the virtual switch within VMware. The network team's visibility into the virtual switch was limited, as was the ability to enforce security at that Layer 2 level. So we're moving to the Cisco 1000V so the networking group can manage and support that product with the VMware team and so we can get better visibility and security on those ports.

Today, if the VM hosts are talking from the same ESX server, that traffic isn't visible on the network — it's never put on the wire. But with the Cisco virtual switch, we'll have visibility into that traffic for troubleshooting and security purposes. So we'll be replacing the VMware virtual switches, dedicating a couple of ESX hosts to the 1000Vs. We'll have a redundant pair per VMware VirtualCenter [now vCenter Server]; today we have three VirtualCenters, so we'll have a total of six 1000Vs — three primary, three passive/secondary.

## DREAM PRODUCT > Real-time intelligent monitoring for small and midsize businesses

There used to be a network management company called Smarts that offered an intelligent

monitoring solution that would identify and allow drill down into single points of failure in real time. But the Smarts product (acquired by EMC) was not affordable for small and midsize businesses. So it would be really cool to have a monitoring/management tool that went across all portions of the infrastructure and allowed you to have a real-time, single point-of-failure solution. If I'm having a problem with a switch, it'll show me, 'Hey, you're getting whatever packet drops on this switch port,' or it'll show me where problems are with server CPUs or database configurations. There are several tools out there that are larger, but I don't see one that's scaled down for the small- and midsize business.



## Bill Fife

**TITLE** > Director of technology

**COMPANY** > Wholesale Electric Supply

**LOCATION** > Houston

**FAVORITE DATA CENTER PRODUCT** > Xsigo Systems virtual I/O Director

The Xsigo Systems virtual I/O Director saves us a lot of money on individual parts and pieces, and by that I mean the Fibre Channel switches, redundant Ethernet switches for iSCSI and all these different cards in the servers. I can install two InfiniBand cards in a 1U server and have redundant equipment — two Xsigo I/O Directors, two Fibre Channel switches, two storage-area network (SAN) controllers. With this equipment, our integrator, Tradentrix, was able to create a quad Fibre Channel path from each server back to the storage network using Xsigo's virtual I/O along with our redundant equipment. That is highly beneficial because now

I can have simultaneous Fibre Channel fabric device failures and never take a hit on I/O. That's almost unheard of.

I can't even calculate how much money it's saved me because I'm not buying those Fibre Channel and Ethernet switches. I'm not buying additional cards. I don't have spares sitting on the shelf. I didn't have to get cables pulled from the server racks back to the equipment rack where the switches would sit. I'm not buying hardware contracts on those switches. I'm not paying for yearly support on the software either and I don't have to manage them.

It's also brought a huge benefit to our virtualization plan, and it's been very functional, has worked quite well and has allowed the users to notice that things are now faster. That's hard to get them to say. When users say something is faster, you almost want to fall over and faint because usually you can't get it fast enough for them.

#### ON DECK > Security information and event management

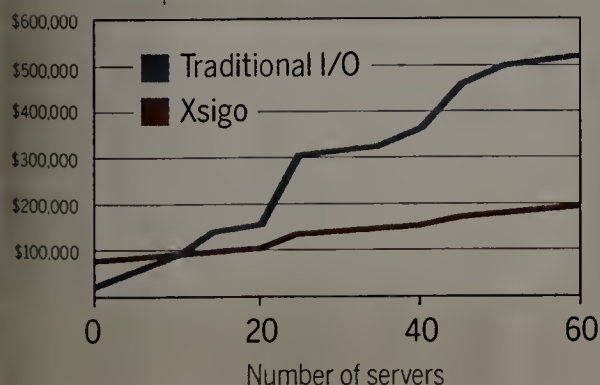
TriGeo Network Security makes a nice product (TriGeo Security Information Manager) for log analysis and that's something we all need to pay more attention to — we don't need any VMs that decide to go off into never-never land. We need to be forewarned about problems.

#### DREAM PRODUCT > End-to-end storage troubleshooting

I haven't looked extensively for this, but I did tear out a recent *Network World* article about benchmarking SAN performance, and have that sitting on my desk. This is something we probably need to do, and if there was an application or an appliance that could look at the switches, down through the storage network, and just tell me where a problem may be occurring in real time, that would be quite helpful. It might exist. I haven't looked for it yet.

**Xsigo's I/O Virtualization technology allows companies to run more virtual machines per physical server, thus reducing overall hardware needs.**

I/O Capex vs. number of servers



### Greg Maxwell

**TITLE** > E-commerce development manager

**COMPANY** > Wet Seal, a clothing retailer

**LOCATION** > Foothill Ranch, Calif.

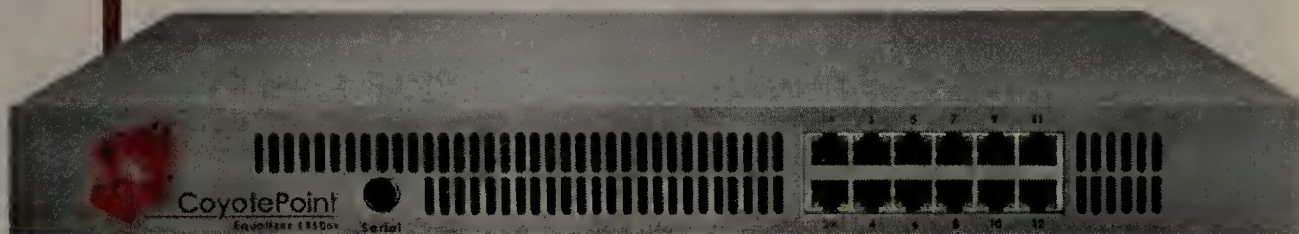
**FAVORITE DATA CENTER PRODUCT** > Coyote Point Systems' Equalizer E350GX

I probably started using Coyotes in '94-'95, before I came to Wet Seal, as one of the lowest-cost alternatives for providing a front-end service for a lot of small Web servers, which meant we didn't need to buy a big Web server. Since then, I've pretty much used Coyote for all my front-end load balancing. It provides the ultimate flexibility for handling high demand for a poor-performance Web application.

When I came to Wet Seal in 2004, it had been running individual Web servers and didn't have a load-balancing solution. Once we started growing, I bought a couple of Coyotes, probably in 2005. I have two, to run in a high-availability combination. Back then I had three servers and now I have seven front-end and four back-end servers, so a total of 11.

One of the main extra things I like is that we can offload the SSL processing to it. I'm able to use a simple front-end and keep things uncomplicated for my consumers by not using SSL on the actual Web servers. It also fixed a cookie problem for us. When a user transfers from a regular to SSL server, we had to do a check to see if the user already had a cookie, so we kind of bounced users twice to see if they have the right information when they show up on the Web server, and that's not necessary now.

I'm also using the compression now, and that's helped take 120 megabits per second of bandwidth down to about 70.



#### ON DECK > Splunk log analyzer software

I'd like to be able to use Splunk to identify Web application performance clogs via a centralized control point. I have a problematic back-end Web server. An application loads up and clogs up servers. We don't know why. During Christmas time, I basically had to keep bouncing servers to keep connections up and running. So it was really annoying. But Splunk can watch the logs and see what errors come up, and then allow me to script a process to bounce the server that's in trouble.

#### DREAM PRODUCT > Enhanced open source IP monitoring and log analysis components

What I'd like to see is a SolarWinds ipMonitor-type product with better small screen push technology and batch job skills — meaning native SSH support — and then add better decision-making skills. Then we'd have the monitoring also working with a Splunk-type tool so we could then watch both ends of the service, public and server log levels. So I think if you took SolarWinds and Splunk and tied them together, you'd get a fairly powerful product. I'm not necessarily looking for this combo product but the pieces that would let me make one.

#### PLEASANT SURPRISES > Fortinet FortiGate-1000A firewall; Breach Security Web Application Firewall

These have been doing much better than originally anticipated, with less management and monitoring. As a retailer, I have a [Payment Card Industry] requirement to do a monthly scan to make sure our Web servers aren't susceptible to third-party attack. In the last two years, Fortinet has implemented intrusion detection, which is working very well for common, known threats so that I'm able to basically capture 80% or better of what scanners and public hackers throw at me.

The Breach product is a second layer, more application-based. The Breach is able to learn and adjust pretty much instantaneously and trap new things that the Fortinet firewall has let through. It's been quite effective.



## Jeffrey Weinstein

**TITLE** > Director of network services

**COMPANY** > MedManagement LLC, a diversified healthcare company

**LOCATION** > Birmingham, Ala.

**FAVORITE DATA CENTER PRODUCT** > Vizioncore vRanger Pro

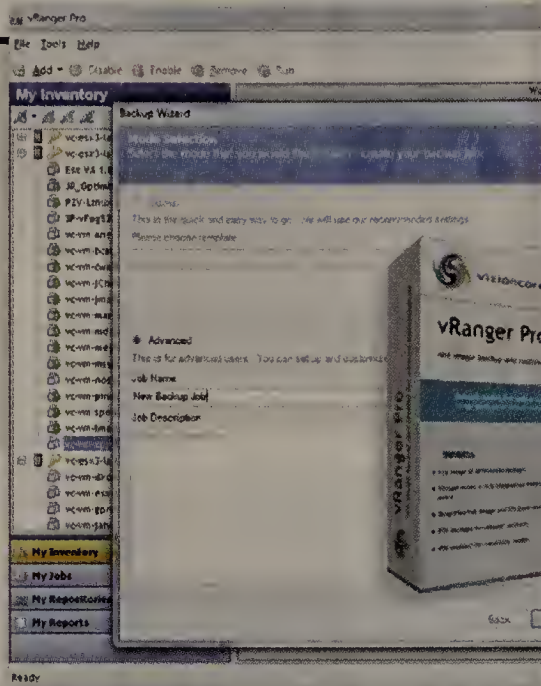
Vizioncore vRanger Pro gives me the ability to back up all of my virtual machines and the capability of restoring something, whether a domain or a single file, as it was at a point in time. That allows me to know that my clients, be they MedManagement customers or employees, are well protected — and it gives me a good way to sleep at night.

I have had to rely on vRanger Pro a few times since we began using it about a year and a half ago. One time a change I made to one of our servers did not work as intended, so we used vRanger Pro to restore the virtual machine as it was prior to the upgrade. Another time, a user deleted one of the directories on a server. We restored the VM from a couple different points in time so the user could tell me which file needed to be restored.

Plus we make it a regular practice to do test restores. If you don't do test restores, and don't do them often, then you can't trust that you're going to be able to restore when something goes awry. Restore time depends on the size of the virtual machine itself, but in the example from earlier this year, restoring the VM, file shares and all, took less than 30 minutes.

**ON DECK** > Vyatta open source routing software

We're getting ready to change our WAN



## I HAVE HAD TO RELY ON VRANGER PRO A FEW TIMES SINCE WE BEGAN USING IT ABOUT A YEAR AND A HALF AGO.

connectivity. We currently have three older Cisco routers. Purchasing one new Cisco router is pretty expensive, much less having to buy two of them for redundancy. So I chose to load the Vyatta open source router on top of dormant physical servers we have from the VMware consolidation.

We're able to plug in all of the circuits we have today and, as we move forward, we'll be ready to add frame connections, T-1, 10M metro Ethernet or otherwise, into this one HP ProLiant DL380 server that has redundant hard drives, power supplies and the like. And with VMware on the other servers, we'll load a

second server the same way and ship the config file over on an hourly basis from the active to the passive router [for disaster recovery].

The servers are a sunk cost and the only thing I need from a hardware standpoint are the circuit termination cards, which cost about \$1,100 each. We spent less than \$3,000 for the Vyatta software, with three years of 24/7 coverage. This compares with the Cisco routers, which would cost from \$5,000 to \$10,000 each.

**DREAM PRODUCT** > Offline-but-available storage

To address growing disk space requirements from virtualization, I want something that would store files, like file shares on a main company or corporate file server, almost in an offline-but-available state that would allow user access. The store would be compressed so that it would save space plus also would appear offline so we wouldn't need to back up files that haven't been accessed in quite a while or consume processor cycles or CPU with antivirus scanning and the like.

**PLEASANT SURPRISES** > vOptimizer Pro

We knew that vOptimizer Pro performed well because I had used earlier versions, but it really has excelled in allowing me to make greater use of our SAN space. When you buy an expensive SAN, each unused gigabyte that's being unnecessarily claimed by a VM is money that your company has lost. By using the vOptimizer Pro, we make use of that space for something I need, whether it be production or test and development. We could do the volume resizing apart from using something like vOptimizer Pro, but we couldn't do it as quickly and possibly not without introducing human error.



## Yefrem Kozin

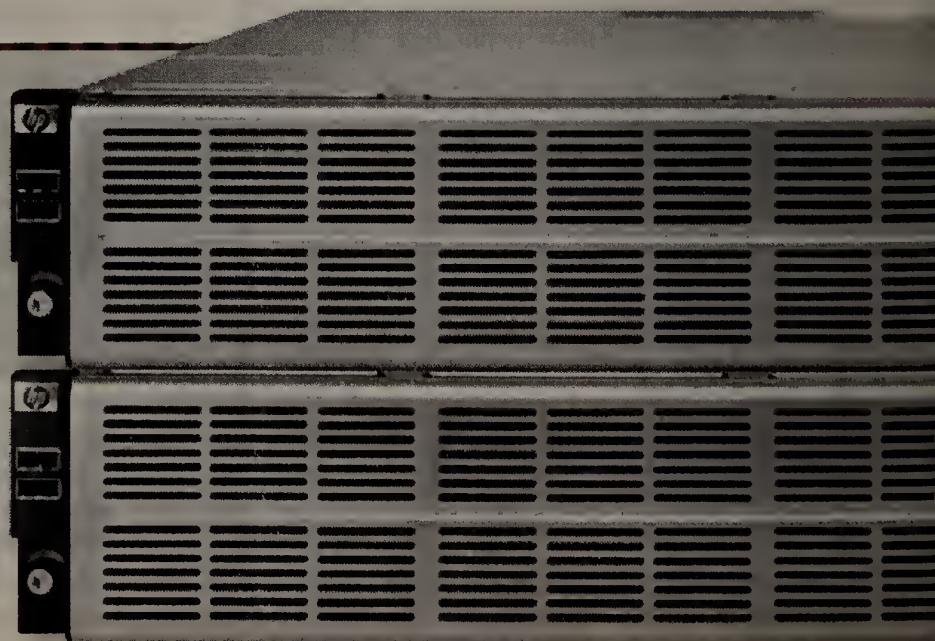
**TITLE** > Manager, College Information Systems

**COMPANY** > Los Angeles Valley College

**LOCATION** > Valley Glen, Calif.

**FAVORITE DATA CENTER PRODUCT** > LeftHand Networks' NSM iSCSI storage systems (now the HP StorageWorks P4000 SAN)

As soon as the industry adopted the iSCSI protocol, we bought one of the first LeftHand Networks' units. Now we have HP/LeftHand NSM2120 R2 storage units, six using SAS [serial-attached SCSI] drives and another six units equipped with SATA [serial ATA] drives. We've also deployed HP BladeSystem c7000 enclosures with ProLiant BL460/465 blade servers, and having 10G

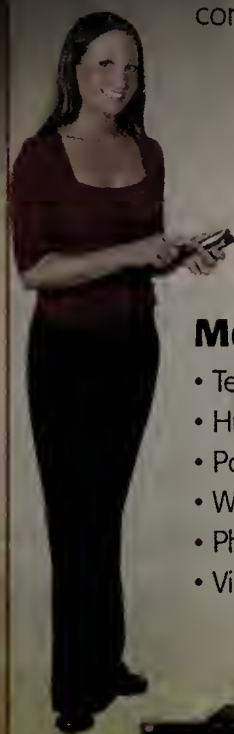


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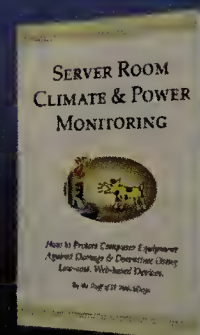
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Ethernet connectivity to a storage system using HP ProCurve 5400zl switches tremendously improves the throughput, reliability and security of our network.

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Thin provisioning really helps to manage storage resources, allocating storage space as needed, and saves the college money.

#### ON DECK > VMware View 4

We've already virtualized our dual-home data centers using VMware products and have deployed an HP BladeSystem Blade PC infrastructure, and we're looking forward to deploying a VDI infrastructure as another important key in keeping our data centers in a "green zone." We have 2,500-plus computers, and a very small IT department, so deploying HP Blade PCs, and eventually VDI, also will help us maintain this infrastructure.

We're in the process of ordering an HP ProLiant BL465 blade server with 48GB of memory to be prepared for a VDI deployment. Based on our experience with VMware, I would say that we will use VMware View 4, plus HP Compaq t5730W thin clients with 2GB of RAM.

#### DREAM PRODUCT > Affordable, clean agent fire protection suppression system

This type of system is available, but it is still cost-prohibitive for deployment in data centers — at least at our campus.

'Greenest' product: HP Integrated Lights-Out (iLO) and KVM switches

The built-in iLO capability [in ProLiant servers] gives us full remote access to all network equipment/infrastructure without requiring additional products, such as computers and monitors, and power demands. To have the HP KVM system in the data center allows using almost no power and having access to hundreds of servers.



### Ambers Ferrara

**TITLE** > Senior systems administrator

**COMPANY** > Transplace

**LOCATION** > Dallas

**FAVORITE DATA CENTER PRODUCT** > VMware vSphere 4

**T**he data center product that we're most familiar with here and use the most is VMware (we're running Microsoft Windows Server 2008 R2 on vSphere 4). We have in the neighborhood of 90% of our infrastructure running on VMware. Just from the Windows side, we've taken 400 physical servers down to 36.

On our Dell [PowerEdge] 2950s, which run dual quad-core processors with 32GB of RAM, we're in the neighborhood of 15 virtual machines per server. On our Dell [PowerEdge] R710s, running dual quad cores with the new Intel Nehalem processor and 144GB of RAM, we get 40 to 50 VMs per physical machine. This year we're going to all R710s, in the end we'll have 40 of them. We're replacing on a one-to-one ratio to give us capacity for growth.

VMware also has given us benefits in licensing. With Microsoft's new policy for licensing on VMware, we can basically get two CPUs worth of licensing that covers all the operating systems that are involved on that host.

VMware also has helped reduce time for building out new servers, deploying servers and applications, and solving maintenance issues. We're almost to the point where we don't have to fix the problem. Instead we just create a new server. And it's helped with our disaster-recovery strategy.

**WE'RE ALMOST TO THE POINT WHERE WE DON'T HAVE TO FIX THE PROBLEM. INSTEAD WE JUST CREATE A NEW SERVER.**

#### ON DECK > Cisco Unified Computing System (UCS) and Microsoft Exchange Server 2010

I'm interested in the Cisco UCS. It's a pretty interesting server concept — it's the first product I've seen that can multiplex the memory. The UCS product would be able to have more memory at faster speeds than we're currently able to do with the R710. And, because it utilizes blade technology, I could see where we may even be able to go with a smaller footprint. I'm anxious to get on Exchange 2010 as that will make a huge difference on our infrastructure and we want to expand out to include Microsoft Office Communications Server for unified messages and corporatewide collaboration.

#### DREAM PRODUCT > Single sign-on (SSO) for software-as-a-service

This isn't really a tool, but it's definitely something we need. We have a SharePoint environment, with all access to it using Active Directory and Kerberos for authentication. We've incorporated Microsoft's entire business intelligence stack for providing software-as-a-service to our customers. We create internal accounts in order to give customers access to dashboards and Excel data. Currently we use Microsoft's ISA [Internet Security & Acceleration] 2006 Server to do that. But we want to let them sign on to our Web page and have seamless access to every offering. After looking at products from RSA Security and Microsoft, we went with BiTKOO. But none really has an integrated approach to allow SSO access into a domain. They have federation and other things, but if I just want SSO for users into my domain, that would be a great tool for us.

#### 'GREENEST' DATA CENTER PRODUCT > VMware and Dell PowerEdge R710 servers

We don't have anything that's contributed more to the decrease in footprint or power consumption. The R710s provides huge power consumption benefits.

#### PLEASANT SURPRISE > Windows Server 2008

Last year, we upgraded 85% of our Windows infrastructure to Windows Server 2008, and so far this year we've upgraded 10% of those to 2008 R2. I had been expecting a lot of fixes, but some of the enhancements Microsoft has made around self-monitoring and optimization are pretty impressive. We had expected big things, and it's delivered even better than we were expecting.

## online

**Tom Franciosi**, CIO at Covenant Dove in Memphis, can't live without his Tools4Ever's User Management Resource Administrator (UMRA). [tinyurl.com/ykahdug](http://tinyurl.com/ykahdug)



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# Top data center trends

Inexorable change is reshaping the data center.  
Here are the four main drivers.

~ BY BETH SCHULTZ ~

## 1. I/O virtualization

I/O virtualization, also known as I/O aggregation, splits interconnections across either 10-gigabit InfiniBand or Ethernet links. Xsigo Systems' virtual I/O Director uses the former and Cisco's Nexus 5000 and 7000 switches the latter, for example.

"In either case, you connect this pipe and then you can get as many virtual Ethernet and Fibre Channel connections as you want out of it," says Logan Harbaugh, an independent analyst and member of the Network World Lab Alliance. "The architectures are similar, as there's a limit to how much they can vary and still provide some level of functionality."

I/O virtualization simplifies the hardware scenario in the data center, reducing the number of connections running to each device while increasing flexibility. Take VMware's recommendation that you assign 1G port per virtual machine (VM). With 24-core servers, you could theoretically run at least 24 and maybe as many as 50 VMs on a single piece of hardware, which in turn would mean needing 50 1G ports, Harbaugh says.

Realistically, even if you could get six four-port Ethernet boards, you'd still only be able to support 24 VMs. "The nice thing about I/O virtualization is that everything shares the one InfiniBand or 10G Ethernet connection as lots of 1G pipes," Harbaugh says.

## 2. Data and storage convergence

Today's data centers typically have distinct data and storage networks, but nobody much likes that situation. "As soon as people can recombine those two networks, that's what they're going to do," says Joel Snyder, senior partner with consulting firm Opus One and another member of the Network World Lab Alliance.

"My belief and, yes, hope is that we'll get rid of pure Fibre Channel and go to Fibre



Channel over Ethernet [FCoE]," he says. "What you can do with Fibre Channel you can do with 10G Ethernet and get equivalent or better performance."

Today, Brocade and Cisco have FCoE-capable switches that fully support all prioritizations and new mechanisms on Ethernet for delivering Fibre Channel-like service levels, and other vendors are coming into the fray. So building a working, end-to-end FCoE network that handles data and storage is possible — at least using the same vendor's gear, says David Newman of Network Test, and a member of the Network World Lab Alliance. Interoperability is unproven as yet.

Indeed, Newman says, the real tipping point in the data center will happen over the next 12 to 18 months when 10G replaces 1G Ethernet on server motherboards. "That'll have all sorts of follow-on effects, enabling data-storage convergence is just one," he says.

## 3. Faster processors, greater consolidation

By now, most enterprises have server consolidation stories to share, spun around a virtualization theme. They tell of impressive physical-to-virtual server ratios, often in the double digits. But consolidation in the data center is just beginning, some say.

The maturity and comfort levels around virtualization are growing, which means enterprises are showing the willingness to put increasingly more VMs on a single system, says Steve Sibley, an IBM Power Systems manager. Within the year, he adds, the Power 750 will support as many as 320 VMs on a single server, and the Power 770 and 780 up to 640 VMs.

The ability to support higher and higher numbers of VMs per physical server comes on the back of faster processors, of course. In IBM's case, the company recently introduced the Power7, an eight-core chip that delivers four times the performance of its predecessor. Intel is readying an eight-core chip, code-named Nehalem-EX, that is expected out by mid-year.

## 4. Infrastructure optimization

Will your data center strategy one day include a semi tractor-trailer full of gear parked in some spot selected for optimal cooling and power supply?

Dan Kusnetzky, vice president of research operations at The 451 Group, says he can imagine so — at least as one potential alternative to building out new or extending existing data centers.

The data-center-in-a-box concept is one that bears watching, agrees Doug Oathout, vice president of converged infrastructure at HP. Companies already are using pods or trailers outside their facilities, optimizing server, storage, networking, cooling and power distribution resources for that size container, he says. "Now we see the performance-optimization trend moving inside the data center."

This is not to say the data center is going to turn into parking lot full of semis. Oathout says, "We're not talking about the container itself, but the concept, being able to say 'I need eight racks of servers, four racks of storage, a rack and half of networking, and here's the power and cooling it will consume,' and optimize that way." ■

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## Seven ethical questions

I HAVE recently found myself pondering business ethics. In case you're wondering, ethics are defined as "standards or codes of behavior expected by the group to which the individual belongs." Thus, business ethics are concerned with how organizations behave with respect to the culture in which they exist. So, you, dear reader, are a cog in the machinery of your organization and how you think about ethical issues and what you do about them has a huge impact on how your organization behaves. With that in mind, here are seven questions to probe your ethics:

**Question 1:** You open an e-mail to find a huge file of your company's HR data that was sent to you in error. You can see how much everyone makes, their performance reports ... everything that is pertinent to their employment. So, do you a) take a quick skim through before notifying the sender; or b) close it immediately and notify the sender? Is it wrong to look even if you keep the information to yourself?

**Question 2:** You find that you can examine people's expenses claims and you see that your boss is cheating for a hundred or so dollars per month. Would you a) report him if you wouldn't face any consequences; or b) report him, consequences be damned, or c) forget about it?

**Question 3:** Now assume the false claims amount to thousands, not hundreds of dollars. What do you do now? If your answer is different to your answer from Question 2, explain.

**Question 4:** In these tough economic times many people are desperate to get a job. Is it unethical to intentionally and significantly underpay a highly qualified candidate?

**Question 5:** You "know" you are underpaid. You can pad your expenses and get away with it and in the grand scheme of things, your

overbilling would be virtually negligible. Is this wrong? If it isn't, why not? If it is wrong, why?

**Question 6:** You discover that a service provider has violated its terms of service and should have refunded some small portion, say a few dollars, of what it charges your organization, but it doesn't make a correction on the bill. If you say anything, it's going to be a huge fuss and could make your life difficult. Do you a) keep quiet or b) make a fuss. If you keep quiet because it's only a few dollars then how much would it have to be before you took action?

**Question 7:** You are part of the team looking for a new CIO. You are down to three candidates and, given the importance of the job, you have the candidates' backgrounds investigated by a private investigator to see whether there is any "dirt" on them. Is it ethical to probe their backgrounds like this? If you were the candidate, would that change your answer?

Non-ethics related bonus question: You have had the candidates investigated and find that: The first candidate used opium in college, drinks excessive amounts of whisky every day, usually sleeps until noon, and is known to have had two mistresses.

The second candidate has been linked to crooked politicians, chain smokes, drinks 10 Martinis a day, has also had two mistresses, and regularly consults with astrologers.

The final candidate is a vegetarian, doesn't smoke, rarely drinks alcohol, is a decorated war hero, and hasn't had any mistresses.

Which candidate would you choose and why? ■

*Gibbs ponders in Ventura, Calif. Send your answers to [backspin@gibbs.com](mailto:backspin@gibbs.com) or comment online.*



## A case of mistaken identity involving Snopes

PEOPLE TEND to get lost on the Internet and I do not mean lost in thought or mindless drivel, though these things are true, too. I mean lost as in they don't know where the

heck they are. Many of you know that I write a blog — called Buzzblog — in addition to filling this space in our print edition. Oddly enough, confusion has arisen between my blog and the exceedingly more famous Snopes.com, online arbiter of fact vs. fiction.

This has occurred because I wrote a blog post about Snopes headlined "Fact-checking the fact-checkers" almost a year ago. That post was circulated widely on social-bookmarking sites, generated robust discussion (much of it inane) and — here's the most important part pertaining to the confusion — settled prominently on the first page of search results returned by Google on any query for Snopes.com.

And query they do, as even though that post is approaching its first birthday, a stream of 75 to 100 visitors a day stumble upon it, the majority having arrived at Buzzblog via Google.

Only problem is that somewhere between Google and Buzzblog they forget where they were going, or, once landing there, they become disoriented and convinced they're at Snopes.

I know this because they leave questions in the comment section; Snopes-like questions; questions readers don't normally ask me. And I see all of these oddball questions because each generates an e-mail alert that lands in my in-box.

A William Perry writes shortly after the item was published: "Is the e-mail re: Obama's handling of the pirates situation true? Did he not

give permission for the Navy Seals to take action, and the Seals commander finally had enough and gave the order to shoot."

I didn't know then and I don't know now.

Dottie writes: "I RECEIVED AN EMAIL FROM A FRIEND, SAYING THAT SONY ERICSSON IS GIVING AWAY A LAPTOP COMPUTER IF YOU EMAIL 8 FRIENDS, A DIFFERENT MODEL IF YOU EMAIL 20 FRIENDS. IS THIS TRUE?"

Not a clue, though I presume Dottie wants a new laptop because the one she has types only in capital letters.

Phil M asks: "Is it true that the ACLU is trying to remove all the crosses from the military cemetery in Washington?"

Huh? How do the Snopes people stand this stuff?

Linda wants to know: "Got an email that says that margarine is like plastic, and very harmful, and that real butter is the only thing people should eat. Is this true?"

On and on they go: Did Obama say (fill in the blank with something unimaginable)? Is this Web site that sounds like a scam really a scam? Will I get a \$50 gift certificate for forwarding this e-mail to my equally gullible friends?

And then there is the latest, offered by Bob R8: "Is Elin living with Tiger? If not where is she living?"

OK, finally, allow me to take a swing at this one: The last time I spoke with Tiger, he said ... No, BobR8, I don't know whether Elin is living with Tiger. Try TMZ.com ... Just don't go through Google to get there. ■

*This e-mail address does, in fact, lead to me: [buzz@nww.com](mailto:buzz@nww.com).*



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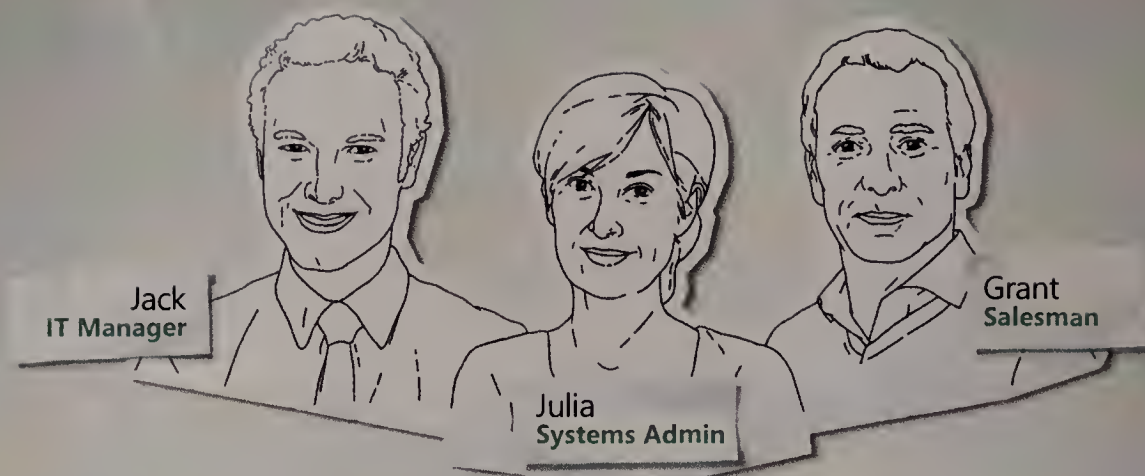
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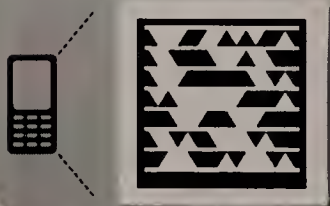
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